pa1030: Box multiplication of linear binomials (v12)

Example

Use the box method to multiply $(6x + 3)$ and $(2x + 4)$.

*	6x	3
2x	$12x^2$	6x
4	24x	12

$12x^2 + 6x + 24x + 12$

Combine like terms.

$12x^2 + 30x + 12$

ANSWER: $12x^2 + 30x + 12$

Question 1

Use the box method to multiply $(3x + 9)$ and $(4x + 6)$.

*	3x	9
4x	$12x^2$	36x
6	18x	54

ANSWER: $12x^2 + 54x + 54$

Question 2

Use the box method to multiply $(6x - 5)$ and $(3x - 4)$.

*	6x	− 5
3x	18x^2	− 15x
− 4	− 24x	20

ANSWER: $18x^2 - 39x + 20$

Question 3

Use the box method to multiply $(-7x + 5)$ and $(-3x + 9)$.

*	− 7x	5
− 3x	21x^2	− 15x
9	− 63x	45

ANSWER: $21x^2 - 78x + 45$